

## ABSTRACT

A preparation process for a first aqueous dispersion comprising an ex-situ photosensitive silver halide and a substantially light-insensitive silver salt of an organic carboxylic acid, comprising the steps of: separately preparing a second aqueous dispersion comprising the ex-situ photosensitive silver halide and a third aqueous dispersion comprising the substantially light-insensitive silver salt of an organic carboxylic acid; and mixing the second aqueous dispersion with the third aqueous dispersion to produce a mixture thereof, characterized in that the first aqueous dispersion thereby produced is substantially free of a water-soluble metal or ammonium salt of an aliphatic carboxylic acid with greater than 12 carbon atoms and the process further comprises a step selected from the group consisting of: increasing the pH of the second aqueous dispersion to a value of at least 8.0 prior to mixing with the third aqueous dispersion; increasing the pH of the third aqueous dispersion to a value of at least 8.0 prior to mixing with the second aqueous dispersion; and increasing the pH of the mixture to a value of at least 8.0; the first aqueous dispersion obtainable therewith; and the use thereof in preparing a photo-addressable thermally developable element of a photothermographic material. A preparation process for a fourth aqueous dispersion is also provided.